

Patron Study

Sunnyvale Public Library



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CIVICTechnologies

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Sunnyvale Public Library

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Sunnyvale Public Library

1.0 Introduction

1.0 Introduction

1.1 Introduction

The purpose of this study is to assist the Library identify general areas for a new library facility based upon a limited demographic and patron pattern analysis.

Please see Map 1.1: City of Sunnyvale.

This study does not identify a specific site or sites but rather general areas.

Due to time and budget limitations other site selection analysis techniques were not utilized (such as checkout patterns, electronic use and database use patterns, and lifestyle segmentation patterns). In addition, the scope of work did not include an evaluation of alternative sites (only identification based upon library use patterns).

While we are aware of information on various websites and through the media of specific sites that are under consideration, we have neither taken those locations nor any of that discussion into account in this study.

1.2 Report Organization

This report is organized as follows:

Chapter 1: Introduction

This chapter is an overall introduction to the study.

Chapter 2: Executive Summary and Findings

This chapter is an executive summary and findings.

Chapter 3: Demographic Profile

This chapter reports on key demographic information.

Chapter 4: Patron Profile

This chapter reports on patron use patterns.

1.3 Methodology

Geographic Data Disclaimer

Geographic information systems (GIS) technology is used on this project to map data from a range of diverse sources described below. Maps are

models of reality. Because they are a model and because there are many ways to consider the data behind the maps, we provide a range of ways to view data in order for a balanced story to emerge.

High Patrons in Non-Residential Areas

Map 4.8 Percent of Adult Patrons shows a high number of patrons in a business/industrial area. This occurs because business people register library cards at their place of employment. Because there are an extremely low number of residents in this area, this area appears to have high patron penetration (patrons as a percent of the population). This is however not the case. As stated above, this type of problem is overcome because multiple ways of analyzing the data are presented herein.

Definition of the Term "Universe"

The term "Universe" is used in this report. Universe refers to the total number of a particular data set studied. For example, the patron universe are the total number of patrons studied. The population universe are the total number of people studied.

Definition of "Median" and "Average"

"Median" is a mathematical result that indicates that one half of a group is higher and one half lower. The median price of 101 sold homes would be that price which is lower than 50 of the prices and is also higher than 50 of them.

"Average" (also called "mean") is the mathematical average of all the terms. To calculate this, add up all the terms, and then divide by the number of terms in the distribution.

1.3 Thematic Maps

Thematic maps are created to illustrate data. A thematic map shows the spatial distribution of one or more specific data theme. The map may be qualitative in nature (e.g., predominant farm types) or quantitative (e.g., population by age). A range of thematic maps are utilized.

1.0 Introduction

1.4 Data

Library Data

- Source: Sunnyvale Public Library
- Data and mapping layers
 - Library location
 - Patron data
 - Checkout data

Geographic Data

- Source: ESRI
 - Data and mapping layers:
 - Census blocks
 - Census designated places
 - Counties
 - Natural features
 - Highways and major roads
 - Water ways, bodies, and rivers
- Source: City of Sunnyvale
 - Data and mapping layers:
 - Neighborhood Planning Areas, see Map 1.2: Neighborhood Planning Areas

Demographic and Growth Data

- Source: ESRI and Census 2000
- Data and mapping layers
 - 2008 population current year estimate
 - 2013 population forecast
 - 2008 population density (persons per square mile)
 - 2013 population density (persons per square mile)
 - 2008 – 2013 population annual growth rate
- Methodology
 - Current year estimate is based upon U.S. Census data. Data is disaggregated to the block group level by ESRI.
 - Five year forecast includes a number of factors such as growth rates, trends, and postal route updates

1.5 Geocoding Results

Geocoding is the process of geographically coding database records to latitude and longitude in order to accurately place information on maps. The geocoding “success” or “match rate” measures the extent to which data is accurately geocoded. Industry standard success rates are between 85 and 95 percent.

- Patron records submitted on July 22, 2008: 63,617
- Total patron records successfully geocoded: 60,516 (95 percent)
- Of the geocoded records, number of patrons in Sunnyvale: 43,235 (71 percent)
- Of the geocoded records, number of patrons outside of Sunnyvale: 17,281 (29 percent)

1.0 Introduction

Context

Map 1.1: City of Sunnyvale

Map Notes

- City boundaries are shown in blue
- The library outlet is shown as a red circle with a black star
- Other features include adjoining cities, county unincorporated areas,, water bodies, freeways and major roads, and railroads



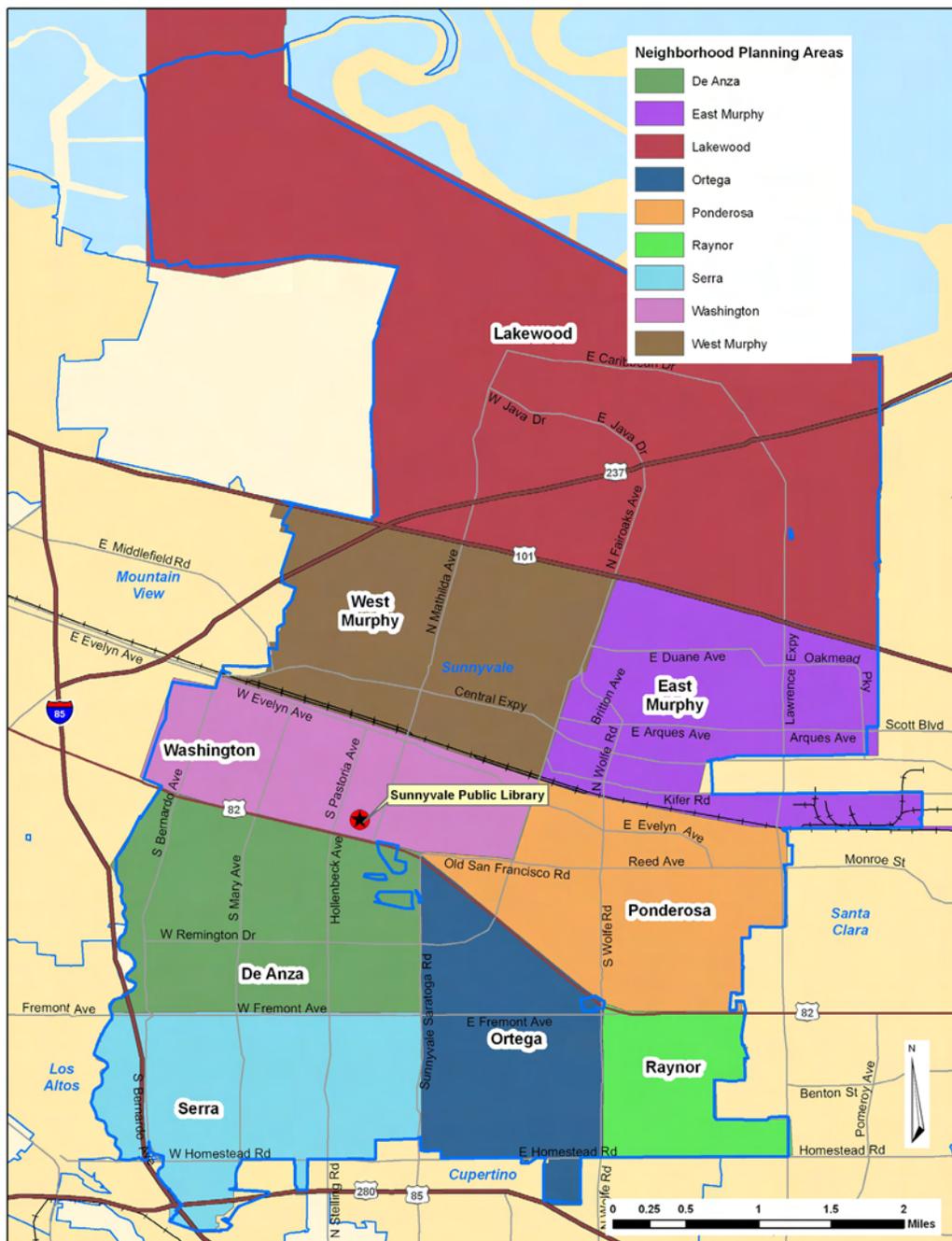
1.0 Introduction

Neighborhood Planning Areas

Map 1.2: Neighborhood Planning Areas

Map Notes

- The city's nine Neighborhood Planning Areas (NPAs) are shown on this map





Sunnyvale Public Library

2.0 Executive Summary



2.0 Executive Summary

Purpose, Context, Demographic/Patron Profiles

2.1 Purpose

The purpose of this study is to utilize demographic and patron mapping patterns to inform the Library's choice of possible sites for a new library facility. Please see certain disclaimers in Chapter 1.0 Introduction.

2.2 Context

Sunnyvale is located in Santa Clara County. It is bound by San Francisco Bay and San Jose to the north, Mountain View to the west, Los Altos to the southwest, Cupertino to the south, Santa Clara to the east. Moffett Federal Airfield is located to the northwest.

Major east/west roads include US 101 (Bayshore Freeway) to the north, Central Expressway and State Route 82 (El Camino Real) through the center of town, and US 280 to the south.

Major north/south roads include State Route 85 to the west, Sunnyvale Saratoga Road and Wolfe Road through the center of town, and Lawrence Expressway to the east.

The city is 22.6 square miles in area. It had a 2000 population of 131,700 for an average density of 6,006 people per square mile.

The existing library is located at in the Civic Center, originally opened in 1960. Since then the library has undergone several on-site expansions.

In 2007 the Library prepared "The Library of the Future Study and Strategy."

2.3 Demographic Profile, Chapter 3.0

The Demographic Profile is based upon data provided by ESRI as described in Chapter 1.0 Introduction. Please refer to Maps 3.1 to 3.11.

Key findings of the demographic profile indicate the following:

- **Map 3.3: 2008 Population Density** and **Map 3.4: 2013 Population Density** shows the same pattern, namely that the highest population density is in census block groups in the following Neighborhood Planning Areas (NPAs): eastern Washington, portions of West

Murphy, Ponderosa, and the southern part of Lakewood

- **Map 3.5: 2008 – 2013 Compound Annual Growth Rate** indicates that the highest growth is in a few census block groups in the following NPAs: Washington, West Murphy, East Murphy, Lakewood, Ponderosa, De Anza, and Raynor
- **Map 3.6: 2008 Percent Youth Population** and **Map 3.7: 2013 Percent Youth Population** shows that the highest youth are in NPAs south of Fremont Avenue (Serra, Ortega, and Raynor), clustered on both sides of Highway 101 (West Murphy and Lakewood), and clustered on both sides of Highway 92 (De Anza and Ponderosa)
- **Map 3.8: 2008 Percent Adult Population** and **Map 3.9: 2008 Percent Adult Population** shows that the highest adults are in the central part of the city (north to south) especially West Murphy and portions of Ponderosa and Ortega followed by East Murphy and Washington
- **Map 3.10: 2008 Percent Senior Population** and **Map 3.11: 2013 Percent Senior Population** shows that the highest seniors are in the northern part of the city in Lakewood and in the southern part of the city in De Anza and Serra plus portions of Ortega, Washington, Raynor, and Ponderosa

2.4 Patron Profile, Chapter 4.0

The Patron Profile is based upon data provided by the Library as described in Chapter 1.0 Introduction. Please refer to Maps 4.1 to 4.9.

- **Map 4.1b: Patron Count by Neighborhood Planning Area** and **Table 4.1: Population and Patron Count by Neighborhood Planning Area** shows the number of patrons, population, and penetration rate by NPA.
- **Map 4.3: Patron Density by Block Group** shows that the highest patron density is located in the middle of the city (going north to south) generally between Fremont Avenue and Highway 101 west of Fair Oaks Avenue in West Murphy and in north Ortega

2.0 Executive Summary

Patron Profile/Location Discussion

- **Map 4.4: Patron Concentration** shows that there are three “poles” of high patron concentration:
 - 1) The highest is in west Ponderosa/east Washington
 - 2) The second highest is in west Washington
 - 3) The third highest is in north West Murphy
 - **Map 4.5: Patron Open Market** shows that the highest open market rate is on the eastern border of the city stretching from Lakewood to Raynor plus pockets in West Murphy east of Fair Oaks Avenue and in portions of Serra
 - **Map 4.7: Percent Youth Patrons** shows that the highest percent of youth patrons are located in south Lakewood and West Murphy followed by portions of Washington, Ponderosa, De Anza, Serra, and Ortega
 - **Map 4.8: Percent Adult Patrons** shows that the highest percent of adult patrons are located in Lakewood north of Highway 101, West Murphy, East Murphy, and Ponderosa
 - **Map 4.9: Percent Senior Patrons** shows that the highest percent of senior population is located in Lakewood north of Highway 101 and in the southern part of the city in Serra and portions of De Anza, Ortega, and Raynor
- 1) The existing library is located between the two highest poles of patron concentration shown in Map 4.4. The highest and largest concentration of patrons is located to the east of the existing library in the Ponderosa NPA. Locating a new branch in this area would be very convenient to the highest and largest group of existing patrons.
 - 2) A second location is north of the existing library where the third highest patron concentration is located near Columbia Park in West Murphy. Locating a new branch in this area would be very convenient to a large number of existing patrons in this neighborhood as well as to others in the north of Highway 101 in Lakewood.

- **Approach #2 -- Where Patrons are NOT Currently Located:**

This approach has the virtue of using a new branch location to stimulate better penetration in areas that are lagging. This would include one of two general areas:

- 1) In the southern part of the city south of Remington Drive in De Anza or near Fremont Avenue in Serra, Ortega, or Raynor.
- 2) In the northern part of the city in south Lakewood.

2.5 Discussion about General Locations for Branch Expansion

Based upon the information generated in this report, we recommend considering two approaches to identifying general areas in which to locate a new branch:

- **Approach #1 -- Where Patrons are Currently Located:**

This approach has the virtue of strengthening the relationship with existing patrons in one of two locations:

Ultimately, the siting of the new branch will have to address two major issues (in so far as the limits of this study are concerned):

- 1) *Strategically decide on a location north, south, or east of the existing library.* Based upon the limited analysis in this report, we recommend that the facility be located south or east of the existing library. The reasons are two-fold:
 - a) South: there is a significant population

2.0 Executive Summary

Location Discussions/Next Steps

in this area, especially children and seniors. A location in Serra, Ortega, or Raynor would be an incentive for these people. A location in Ortega would have the benefit of splitting the distance between Serra and Raynor, and picking up existing patrons traveling south from the high concentrations in Ponderosa.

- b) East: selecting a location in eastern Ponderosa would support three markets: the significant open market north of Highway 101 in Lakewood, a similar open market in Raynor, and the existing high penetration in west Ponderosa.
- 2) *Balance Approach #1: Where Patrons are Located and Approach #2: Where Patrons are NOT Located.* This would put the new branch in the eastern part of Ponderosa for reasons cited above.

2.6 Next Steps

There are three next steps with CIVICTechnologies that would inform the cities site selection process:

- 1) **Analysis of checkouts and other use indicators (database and electronic usage, if data is available):** this analysis will complement the patron analysis contained in this report by providing further evidence of patron use patterns
- 2) **Analysis of Tapestry Lifestyle Segments:** this analysis will provide insights into who lives in which areas, assisting the Library better understand how locational choices will affect equity of services and the Library's ability to reach underserved and/or underprivileged populations
- 3) **Site evaluation:** this analysis will rank alternative sites in terms of library use patterns and Tapestry Lifestyle segments in order to clarify how each location will meet local and city-wide needs and interests.